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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,669	07/14/2006	Toshimitsu Fujiwara	204552035700	5567
25227 7590 05/15/2007 MORRISON & FOERSTER LLP 1650 TYSONS BOULEVARD SUITE 400 MCLEAN, VA 22102			EXAMINER THOMPSON, JEWEL VERGIE	
			ART UNIT 2855	PAPER NUMBER
			MAIL DATE 05/15/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/551,669

Applicant(s)

FUJIWARA ET AL.

Examiner

Jewel V. Thompson

Art Unit

2855

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 9-16 is/are rejected.
- 7) ☒ Claim(s) 7 and 8 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Jewel V. Thompson
JEWEL THOMPSON
PRIMARY EXAMINER

5/20/07

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 2/22/07.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Speldrich et al (6,655,207).

Regarding claim 1, Speldrich et al teaches a flow measurement device, comprising: a flow path (34) in which a fluid to be measured (fig. 1); a flow sensor (42) provided on a wall surface of the flow path (fig. 1); and a member (62) having minimal cross-section flow path, the member being disposed at the downstream of the flow sensor (fig. 1), and having an opening ratio of less than 6.25% (fig. 2).

Regarding claim 3, Speldrich et al teaches a mesh (54) is disposed at the upstream side of the member having minimal cross-section flow path (fig. 7).

Regarding claim 15, Speldrich et al teaches the member having minimal cross-section flow path is a foamed body or a sintered body which has a plurality of non-linear continuous flow paths inside (fig. 2).

Regarding claim 16, Speldrich et al teaches the member having minimal cross-section flow path is a member combined with a number of pipes (fig. 2).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Speldrich et al in view of Schoess (6,652,740)

Regarding claim 2, Speldrich et al fails to teach the member having minimal cross-section flow path is a perforated plate having an aperture as the minimal cross-section flow path. Schoess teaches a tapping plate (16) comprising an aperture (fig. 5). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to have used the perforated plate of Shoess in the apparatus of Speldrich et al for the purpose of filtering the fluid so that debris is not allowed to travel through.

Regarding claim 4, Shoess teaches the aperture is eccentric with respect to the center of the flow path (fig. 5).

Regarding claim 5, Shoess teaches the aperture comprises a plurality of apertures (col. 4, lines 18-21).

Regarding claim 6, Speldrich et al teaches the aperture comprises a plurality of apertures disposed like a mesh (fig. 9).

3. Claims 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Speldrich et al.

Regarding claim 9, Speldrich et al fails to teach the shape of the cross section of the aperture in a axial direction is oblique with respect to a axial line of the flow path. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the shape of the cross section of the aperture is oblique with respect to an axial line of the flow path, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the aperture oblique to the axial line of the flow path in the apparatus of Speldrich et al for the purpose of directing the flow in a different direction away from an element.

Regarding claim 11, Speldrich fails to teach the aperture is beveled from both sides or one side. It would have been an obvious matter of design choice to have made the aperture beveled, since such a modification would have involved a mere change in the shape of a component. A change in shape is generally recognized as being with the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to

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have had the shape of the aperture beveled for the purpose of being able to have a pole or conduit, which is beveled to fit through.

4. Claim 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Speldrich et al in view of Schoess as applied to claim 2 above, and further in view of Myhre (4,376,929).

Regarding claim 10, Speldrich et al in view of Schoess fails to teach the aperture is etched from both sides or one side. Myhre teaches the plate would be etched through its thickness at the aperture (156 to 158). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to have used the process of etching as that of Myhre in the apparatus of Speldrich for the purpose of providing a hole in the plate so that the fluid could flow through.

Allowable Subject Matter

5. Claims 7 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments filed February 22, 2007 have been fully considered but they are not persuasive.

Applicant argues that Speldrich does not teach an opening ratio of less than 6.25%

Examiner disagrees. Speldrich shows in fig. 2 multiple openings having a ratio of less than 6.25%.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jewel V. Thompson whose telephone number is 571-272-2189. The examiner can normally be reached on 7-4:30, telework on Wednesday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

May 10, 2007


JEWEL THOMPSON
PRIMARY EXAMINER
5/10/07